

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Express Mail No.: EL649158779US  
Date of Deposit: 07 October 2003



Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): Christopher J. ZIOLKOWSKI et al.

For: LONG RANGE DATA TRANSMITTER FOR HORIZONTAL DIRECTIONAL DRILLING

Enclosed are:

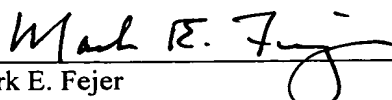
- ☒ Fifteen (15) pages of specification, six (6) pages of claims (Claims 1-18), one (1) page of Abstract, and four (4) sheets of drawings (Figs. 1-4).
- ☒ Executed combined Oath or Declaration, Power of Attorney and Petition.
- ☒ Certificate of Mailing by Express Mail.
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.
- ☒ Recordation Form Cover Sheet, in duplicate, together with executed Assignment Document.
- ☒ Information Disclosure Statement, together with Form PTO-1449 (1 page) and with a copy of each and every cited reference.
- ☒ Return Receipt Postcard.

The filing fee has been calculated as shown below:

COL. 1		COL. 2	SMALL ENTITY		OR	LARGE ENTITY	
FOR:	NO. FILED	NO. EXTRA	RATE	FEE		RATE	FEE
BASIC FEE				\$385	OR		\$770
TOTAL CLAIMS	18 less 20	0	X 09 =	0	OR	X 18 =	
INDEPENDENT CLAIMS	4 less 3	1	X 43 =	43	OR	X 86 =	
MULTIPLE DEPENDENT CLAIMS PRESENTED			+145 =		OR	+290 =	
* IF THE DIFFERENCE IN COL. 1 IS LESS THAN ZERO, ENTER "0" IN COL. 2			TOTAL	428	OR	TOTAL	

- ☒ Please charge my Account No. 502045 in the amount of (\$428.00). A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 502045. A duplicate copy of this sheet is enclosed.
  - ☒ Any additional filing fees required under 37 CFR 1.16.
  - ☐ Any patent application processing fees under 37 CFR 1.17.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Christopher J. ZIOLKOWSKI  
Maximillian J. KIEBA

Title: LONG RANGE DATA TRANSMITTER FOR  
HORIZONTAL DIRECTIONAL DRILLING

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**CERTIFICATE OF MAILING BY EXPRESS MAIL**

**Mail Stop PATENT APPLICATION**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that the subject patent application is being deposited with the United States Postal Service as Express Mail Post Office to Addressee No. EL649158779US, on 07 October 2003, and is addressed to Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, together with the items listed below.

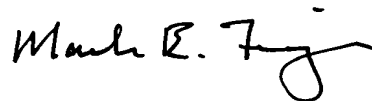
- Transmittal Letter, in duplicate
- Fifteen (15) pages of specification, six (6) pages of claims (Claims 1-18), one (1) page of Abstract, and four (4) sheets of drawings (Figs. 1-4)

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Executed combined Oath or Declaration, Power of Attorney and  
Petition

- Information Disclosure Statement, together with Form PTO-1449 (1 page) and with a copy of each and every cited reference.
- One (1) Recordation Form Cover Sheet, in duplicate, together with executed Assignment Document
- Return Receipt Postcard

Respectfully submitted,



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